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ABSTRACT

A locally revised measure of self-concept and racial attitudes was used to determine if factor analysis could detect possible item bias. Participants were 2,800 Hispanic Americans, Whites, and Blacks in fifth or eighth grade. A classical factor analysis (using commonality estimates) with Varimax rotation defined the factor structure of all non-demographic items, for each ethnic group separately and for all groups combined. Only the fifth grade Hispanic group and the eighth grade White group failed to match the combined factor structure. The remaining four groups differed only by order of factors extracted during rotation. Although item bias was not present, the importance of factor analysis cannot be overemphasized because grouping by sex, socioeconomic status, or ethnicity may effect test validity. (CP)

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The Effects of Item Bias on Affective Scales

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A paper presented at the annual meeting of the American Educational Research Association, Boston, Mass, April, 1980.

Abstract

The purpose of the study was to investigate the possibility of item bias occuring in an affective instrument. The data were collected as part of an evaluation of a school district's integration effort. It was of interest to determine whether the instrument would describe the attitudes of students from three ethnic groups (Black, Hispanic, and White) in a similar fashion. Results indicated that the scale was differentially valid for the three ethnic groups and that while certain items may have content validity, students do not respond to those items in the same manner. Implications for score interpretations were provided.

THE EFFECTS OF ITEM BIAS ON AFFECTIVE SCALES

Traditionally, item bias has been analyzed and discussed in reference to cognitive measurement. However, recently there has been an increase in the use of both cognitive and affective measurement in the areas of student assessment and program evaluation. Therefore, it is encumbant upon the researcher or evaluator using an affective instrument to consider whether items on these instruments may be biased for certain groups of students.

Affective or attitude scales require conceptualization and definition of the construct to be measured. One approach has been to define an attitude strictly in terms of its measurement (Bair, 1928; Deflour and Westin, 1963; Horowitz, 1944). An attitude may also be defined in relation to a behavioral criterion (McGuire, 1969). Sherif, Sherif, and Netergall (1965) indicated that a correlation to some criterion was too simple and called for an analysis of the interaction of the attitude and the emotional environmental stimulus. In the present study an attitude was defined as an intervening mediating construct. The attitude scale mediates between a latent hypothesized human characteristic and the behavioral outcome. Green (1967) has explained this point of view in detail,

> Like many psychological variables, attitude is an hypothetical or latent variable, rather than an immediately observable variable. The concept of attitude does not refer to any one specific act or response of an individual, but is an abstraction from a large number of related acts or responses (p. 725).

In the factorial development of an attitude scale one approach is to propose a theory, then develop items to assess the theory. The scale is validated through factor analysis by selecting. Items that load on the theorized factor or factors of the attitude being measured.

A related aspect of the develpment and validation of an attitude scale is whether the items on the scale may be biased for some ethnic group. Green (1975) has broken bias into three major areas: selection, prediction and description. In all three areas, bias is in effect the differential portaiture of groups who are in fact not different, at least to the extent as portrayed by the measurement. With regard to bias in description, Green noted that factor analysis has been used in an attempt to identify score variance specific to different groups. Merz (1973, 1978) has also used factor analysis in an attempt to detect item bias. Jensen (1978) has discussed differential factor structure as being closely related to the effects of item bias, concluding that factor structure can used indirectly to detect item bias. The above cited authors have based their conclusions about the use of factor analysis to detect item bias on cognitive instruments. The purpose of the present study was to determine whether factor analysis would be a viable method to detect item bias, if present, in an affective instrument administered to an ethnically diverse population. Thus, the study was exploratory in nature.

METHODOLOGY

Sample

The population was composed of students in grades 5 and 8 from a large urban school district who were participants in a districtwide integration study. In the fifth grade, a total of 34,492 students were tested. From this group a four percent random sample was selected for the study (N=1638). The ethnic breakdown for the fifth grade sample was Hispanic (N=517), White (N=633), and Black (N=488). At the eighth grade level, a total of 29,840 students were tested. Again, a four percent random sample was selected for the study (N=1266). The ethnic breakdown for the eighth grade sample was Hispanic (N=384), White (N=491), and Black (N=391).

Instrument

The instrument for use in the study was originally developed by the Educational Testing Service for a nationwide integration study to assess self-concept and attitude toward school (Forhand, Ragosta, and Rock, 1976). The instrument was further refined by adding or changing items to meet local school district needs. The fifth grade questionnaire contained 46 items, and the eigth grade questionnaire contained 66 items. Both questionnaires have been reproduced in Appendix A, and only the starred items were used in the analysis. The items omitted were demographic in nature.

Procedure

A classical factor analysis (using communality estimates) with Varimax rotation was used to define the factor structure of the scale for each ethnic group separately and for all ethnic groups combined. First, a factor analysis was run with the sample containing all ethnic groups to determine the "criterion" factor structure. Then, a factor analysis was run using

each ethnic group separately to determine the factor structure for the Black, White, and Hispanic groups. The same procedure was conducted for both grade levels.

The criterion factor structure was then compared to each ethnic group factor structure to investigate bias. If the factor structures were similar then the instrument was not seen as biased. However, if the factor structures were dissimilar a case for instrument bias would exist. Two variables were compared to check for similarity in factor structures, inclusion and order. Inclusion was determined by the percent of items on a specific ethnic group factor that was found or included in the similar criterion group factor. Order was determined by noting which factors were extracted first, second, third etc., during the rotation process.

RESULTS

The factor structure based on the responses of all students was compared to the factor structure based on each ethnic group. The comparison between factor structures was made in two areas. First, the degree of item-factor agreement, referred to as inclusion was considered. For example, the more items that loaded on factor I for a specific ethnic group that also loaded on factor I for the criterion group, the better the comparison.

The degree of inclusion or agreement between the factor structures was indicated by percentages. The percentages were derived by dividing the total number of agreements in terms of items loading on a factor ($\geq .30$) for the criterion group by the number of items loading on the same factor for each ethnic group. A 100 percent inclusion meant that the

ethnic group structure was completely included or contained in the criterion structure. The lower the inclusion, the lower the correspondence between the criterion structure and the structure of the ethnic group being compared. Since the study was exploratory, a rule of thumb of 60 percent or greater inclusion was assumed to be adequate for structure equivalency.

Second, the order of factor extraction was considered. For instance, the first factor in the criterion group may contain nearly the same items that the third factor in an ethnic group contained, thus, the factors would still be titled the same, only the order of extraction would differ. The order of extraction is related to the importance than the order of factor extraction for the comparisons. These two comparison procedures were conducted for each ethnic group and the results have been reported separately by grade level.

The Fifth Grade Sample

For the fifth grade 29 of the 46 items were used in the analysis, 15 being demographic. The criterion factor structure indicated the presence of six factors. Six factors were also found for the White and Black ethnic groups, but only five factors developed in the factor structure of the Hispanic sample. It appeared that the last factor in the criterion structure was the factor not included in the Hispanic structure.

Table 1 indicated the factor structure including item loadings for the criterion and ethnic groups. Based on Table 1, the percentage of item inclusion and factor order for each ethnic group compared to the criterion group were derived and have been reported on Tables 2-4.

Insert Tables 1-4 About Here

From Table 2 it can be seen that the White sample had the same order of factor extraction as the criterion group (values on the diagonal). In terms of inclusion, the White sample was the best with perfect inclusion in three of six factors (1, 3, and 4) with fairly reasonable approximations from factors 2 and 5. While only 40 percent of the items on Factor 6 matched the criterion group.

The order of extraction for the Black sample (Table 3) matched the criterion group for half the factors (1, 2, and 5). Two factors for the Black sample contained the same items as the criterion group (3 and 4), and a fairly close match for two additional factors (1 and 5). Factor 2 slightly overlapped with factor 5 of the criterion group and factor 6 contained only 33 percent of the items in the criterion group.

The Hispanic group (Table 4) seemed to have little if any order relation to the criterion group. The overlap between factors 2, 3, 4, and 5 between the Hispanic and criterion group indicated that the factor structure for the Hispanic group failed to adequately match the criterion group.

The Eighth Grade Sample

For the eighth grade 47 of the 66 items were used in the analysis, 19 being demographic. The criterion group represented by all students produced a factor structure composed of five rotated factors. The Black and Hispanic groups separately produced five rotated factors, while the White group was best described by a four factor solution. It appeared that the fifth factor in the criterion group was not included in the White ethnic group factor structure.

Table 5 indicated the factor structure including item loadings for the criterion and ethnic groups. Based on Table 5, the percentage of item inclusion and factor order for each ethnic group was compared to the criterion

group has been reported on Tables 6-8.

Insert Tables 5-8 About Here

The White sample (Table 6) was in order agreement and nearly perfect inclusion with the criterion group on two of the four factors (1 and 4). Factor 3 had very adequate inclusion with the criterion, but factor 2 did not.

For the Black sample (Table 7) the order of extraction matched the criterion group for only two factors (1 and 2). The percent of item inclusion was very good for factors 1, 2, and 5. Factor 3 overlapped with factors 1 and 4 of the criterion group, and factor 4 included only 40 percent of the items found in the criterion group for factor 2.

The Hispanic sample (Table 8) evidenced fairly good order when compared to the criterion group with the exception of factor 5. Inclusion was very good for factors 1, 2, 4, and 5. The overlap in factor 5 with the criterion indicated a slight disagreement. Factor 3 contained only 33 percent of the items in the criterion group.

Comparing across grade levels the Black samples were most consistent in their comparison to the criterion groups, lacking extremely good or extremely poor fit in terms of inclusion and order. The White fifth grade sample compared very well, and the White eighth grade sample was adequate in comparison to the criterion on 3 of 4 factors. The opposite was true for the Hispanic samples. The eighth grade comparison was very good while the fifth grade sample seemed not to compare at all to the criterion group.

DISCUSSION AND CONCLUSION

The factor structure comparisons produced results that suggested generally the ethnic groups adequately matched the criterion factor structure. Only the fifth grade Hispanic group and the eighth grade White group failed to match the criterion structure consistently enough to be considered baised. The rest of the structures presented only inconsistent order comparisons. And two of the groups exhibited no problems in either order or inclusion of the group structures relative to the criterion factor structure.

In terms of the theoretical aspects of the study, the analysis did not present a totally clear picture. According to Green (1975) descriptive bias occurs when a scale is describing an entire group less accurately than it describes one or more of the subgroups. The factor analysis conducted for the present study produced factor structurees for each ethnic group that were compared to a criterion structure that was produced by factor analyzing all the groups together. Only one of the ethnic structures in each grade suggested a case for biased description, namely the fifth grade Hispanic group and the eighth grade White group. The other structures, however, were adequately or more than adequately described by the criterion structure. Hence, the most that can be said in terms of descriptive bias is that one group in each grade level would need special consideration in terms of interpreting the results of the instrument for that group.

Although an indication of descriptive bias was not resoundingly apparent, perhaps because the instrument selected was not biased for the chosen population, the results do have implications for educators using affective measurement such as the one used in the present study. Educators need to be aware of the effect of scale structure on the interpretation of attitude measurement.

The importance of determining factorial invariance of attitude scales cannot be over emphasized. If the factor structure of an instrument changes as the respondent population changes then the validity of the instrument must be questioned. The necessity for investigating bias increases as the description derived may influence important decisions such as in desegregation studies, and as the decisions affect larger numbers of people. The need for inspection of scale structures would also increase as the populations measured become more diverse in terms of the nature of groups being measured. Thus, the structure of a scale may depend on the type of grouping such as sex, socio-economic, or ethnicity.

In light of the educational importance as well as the development of theory in the area of item bias, more work needs to be done in several areas. First, it is important to determine if the type of grouping is apt to produce differential factor structures. Depending on the attitude being measured, it may be that ethnicity is not the only type of grouping to focus on. In the present study, it may be that the difference in the ethnic group comparison was due to socio-economic status differences within the ethnic groups, or the fact that one sex was over-represented. Thus, the effect of grouping needs to be investigated further in relation to item bias in affective measurement. Second, the methodology of detecting bias in items needs to be more throughly studied. Since the present study was exploratory, factor analysis was used merely to describe the criterion and separate ethnic group factor structures. Follow up analyses would be necessary to determine if the ethnic factor structures differ significantly from the criterion structure perhaps by employing confirmatory factor analysis. Generally, the methodology of detecting bias in items in either

a cognitive or an affective instrument requires further applied and theoretical investigation.

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Table 1

Comparison of Factor Structures for the Fifth Grade by Item Loadings and Percent of Variance Accounted For

	Criterion		Black		Hispanic		White	
	Item	Loading[a]	Item	Loading	Item	Loading	Item	Loading
Factor I	16	.72	16	.71	18	.54	16	.71
	9	.60	9	.67	27	.48	9	.63
	20	.43	14	.57	17	.44	20	.50
	14	.36	20	.50	19	.44	14	.41
			13	.36	23	.39		
			30	.36	5	.37		
					46	.33		
Factor Eigen Values		1.45		2.26		1.65		1.65
Factor II	19	.53	18	.41	16	.64	19	.52
	17	.42	17	.39	9	.61	17	.49
	18	.42	24	.39	14	.41	24	.48
	23	.38	26	.39	20	.41	27	.40
	44	.36	19	.38	13	.41	23	.40
	24	.35	25	.34	29	.37	18	.38
	40	.30	15	.34	30	.37		
			27	.33	25	-.33		
			21	.30				
Factor Eigen Values		1.65		1.59		1.84		1.55
Factor III	38	.76	5	.50	43	.57	38	.78
	39	.74	22	.50	42	.53	39	.73
			31	.49	41	.47		
			29	.44	45	.43		
			28	.40	31	.31		
Factor Eigen Values		1.21		1.45		1.38		1.36
Factor IV	22	.46	38	.79	39	.74	22	.47
	5	.43	39	.76	38	.72	5	.46
	29	.43			44	.32	29	.38
	31	.41					31	.38
	30	.34						
	28	.32						
Factor Eigen Values		1.22		1.30		1.43		1.13
Factor V	43	.60	43	.54	15	.39	43	.60
	44	.59	41	.54	22	.34	42	.52
	41	.44	42	.42	24	.34	45	.41
	45	.36			21	.31	41	.37
Factor Eigen Values		1.03		.92		1.02		1.08
Factor VI	26	.42	29	.53			26	.54
	25	.42	28	-.49			15	.45
			24	-.37			25	.38
							13	.34
							14	.32
Factor Eigen Values		.87		.77				1.08

[a]Loadings of ≥ .30 were reported

Table 2

Compairson of the Criterion
and White Sample in Terms of Item Inclusion and Factor Order

Grade 5

Six Factors Extracted for Criterion Group N= 1638	Six Factors Extracted for the White Sample N= 633					
	1	2	3	4	5	6
1	1.00	---	---	---	---	.20
2	---	.71	---	---	---	---
3	---	---	1.00	---	---	---
4	---	---	---	1.00	---	---
5	---	---	---	---	.75	---
6	---	---	---	---	---	.40

Table 3

Comparison of the Criterion
and Black Sample in Terms of Item Inclusion and Factor Order

Grade 5

Six Factors Extracted for Criterion Group N= 1638	Six Factors Extracted for the Black Sample N= 488					
	1	2	3	4	5	6
1	.67	---	---	---	---	---
2	---	.44	---	---	---	---
3	---	---	---	1.00	---	---
4	.17	---	1.00	---	---	.33
5	---	.11	---	---	.67	---
6	---	---	---	---	---	---

Table 4

Comparison of the Criterion
and Hispanic Sample in Terms of Item Inclusion and Factor Order

Grade 5

Six Factors Extracted for Criterion Group N= 1638	Five Factors Extracted for the Hispanic Sample N= 517				
	1	2	3	4	5
1	---	.50	---	---	---
2	.71	---	---	.33	.25
3	---	---	---	.67	---
4	.14	.25	.20	---	.25
5	---	---	.60	---	---
6	---	.13	---	---	---

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Table 5

Comparison of Factor Structures for the Eighth Grade by Item Loadings and Percent of Variance Accounted for

	Criterion		Black		Hispanic		White	
	Item	Loading[a]	Item	Loading	Item	Loading	Item	Loading
Factor I	62	.81	62	.83	62	.77	62	.83
	61	.75	61	.79	57	.73	64	.79
	57	.71	59	.76	63	.71	61	.79
	64	.70	64	.76	65	.70	63	.78
	65	.70	57	.75	61	.69	65	.71
	63	.68	65	.72	58	.67	58	.65
	59	.68	58	.65	59	.64	59	.64
	58	.68	60	.64	56	.63	57	.51
	60	.63	63	.63	60	.62	60	.36
	56	.59	56	.63	64	.62	56	.35
	54	.39	54	.37	54	.42		
	49	.31			49	.34		
Factor Eigen Values		5.42		5.77		5.24		5.50
Factor II	32	.60	30	.59	30	.62	29	.48
	21	.47	21	.49	33	.50	12	.44
	33	.45	33	.47	21	.46	13	.44
	40	.43	40	.44	36	.42	39	.41
	31	.41	38	.43	39	.41	15	-.36
	38	.41	41	.42	7	.41	18	-.30
	19	.40	32	.42	31	.41	5	-.30
	41	.40	35	.40	37	.37	19	-.30
	39	.38	34	.40	35	.37		
	7	.37	19	.39	34	.36		
	35	.37	31	.38	38	.36		
	34	.34	7	.36	19	.35		
	37	.33	39	.32	40	.33		
	36	.32	24	.31	32	.31		
	24	.32						
	26	.31						
Factor Eigen Values		2.98		2.99		2.05		2.20
Factor III	29	.57	53	.64	28	.48	40	.55
	27	.56	52	.52	29	-.47	38	.50
	13	.45	54	.49	15	.43	30	.49
	23	.43	19	.36	13	-.43	19	.43
	25	.33	49	.31	12	.42	31	.38
	12	-.31			5	.42	35	.36
							25	.36
							34	.35
							36	.34
							39	.34
							33	.32
							37	.31
Factor Eigen Values		1.78		2.02		3.03		2.94
Factor IV	53	.62	7	.46	53	.61	53	.61
	52	.56	22	-.40	51	.55	52	.57
	51	.53	36	-.39	52	.52	55	.56
	55	.41	11	-.39	55	.44	51	.48
			31	.34			54	.33
Factor Eigen Values		1.58		1.44		1.70		2.10
Factor V	18	.37	27	.64	20	.55		
	20	.33	29	.54	27	.48		
	22	.30	23	.47	18	.44		
			13	.40	22	.35		
			39	.37	23	.34		
			25	.35				
Factor Eigen Values		1.08		1.73		1.74		

[a] loadings of ±.30 were reported

Table 6

Comparison of the Criterion
and White Sample in Terms of Item Inclusion and Factor Order

Grade 8

Five Factors Extracted for Criterion Group N= 1266	Four Factors Extracted for the White Sample N= 491			
	1	2	3	4
1	1.00	---	---	---
2	---	---	.83	---
3	---	.29	.08	---
4	---	---	---	.80
5	---	---	---	---

Table 7

Comparison of the Criterion
and Black Sample in Terms of Item Inclusion and Factor Order

Grade 8

Five Factors Extracted for Criterion Group N= 1266	Five Factors Extracted for the Black Sample N= 391				
	1	2	3	4	5
1	1.00	---	.40	---	---
2	---	.86	---	.40	.17
3	---	---	---	---	.83
4	---	---	.40	---	---
5	---	---	---	---	---

Table 8

Comparison of the Criterion
and Hispanic Sample in Terms of Item Inclusion and Factor Order

Grade 8

Five Factors Extracted for Criterion Group N= 1266	Five Factors Extracted for the Hispanic Sample N= 384				
	1	2	3	4	5
1	1.00	---	---	---	---
2	---	1.00	---	---	.40
3	---	---	.33	---	---
4	---	---	---	1.00	---
5	---	---	---	---	.60

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APPENDIX A

The Fifth and Eighth Grade

Affective Questionnaires*

*(Only starred items were used in the analyses)

1. Which of the following best describes you?

   a American Indian or Alaskan Native

   b Asian American or Pacific Islander

   c Black

   d Hispanic

   e White

2. Did you go to kindergarten?

   f Yes

   g No

3. Do you own a bicycle?

   a Yes

   b No

4. How many brothers and sisters do you have?

   f None

   g One

   h Two

   j Three

   k Four or more

*5. How are you at doing school work?

   a Better than most students

   b About the same as most students

   c Not as good as most students

6. Is there any adult at this school you could talk to if you were upset or in trouble?

f Yes

g No

7. Has your mother or father visited school during this school year?

a Yes

b No

8. Are you getting more help or less help from your parents with your school work now than in the beginning of this school year?

f More help

g Less help

h Same amount of help

j My parents never have helped me with school work

*9. Do you think your teacher likes you?

a Yes

b No

10. Are your parents satisfied with the grades you get in school?

f Yes

g No

11. Does your family have a telephone?

a Yes

b No

12. Did anyone at home read to you when you were little--before you started school?

f Yes

g No

*13. In the past week, did you think any of your school work or homework was fun?

a Yes

b No

* 14. How do you feel about school?

f I usually like school

g I usually don't like school

* 15. At school, are you often blamed for things that just aren't your fault?

a Yes

b No

* 16. Do you like your teacher?

f Yes

g No

* 17. Is reading too hard for you now?

a Reading is too hard for me

b Reading is not too hard for me

* 18. Is arithmetic too hard for you now?

f Yes

g No

* 19. Does your teacher or someone else at school give you special help with your reading?

a Yes

b No

* 20. Do you think most of the rules in your classroom are fair?

f Yes

g No

* 21. Are some kids just naturally lucky?

a Yes

b No

* 22. Do you think you can do things as well as most students can?

f Yes

g No

* 23. When you take a test, do you get so nervous you can't think clearly?

a Yes

b No

*24. Do you think good luck is just as important for success as hard work?

f Yes

g No

*25. Do you get really angry when teachers try to make you do things you don't want to do?

a Yes

b No

*26. Have you been in any fights at school this school year?

f Yes

g No

*27. Do you think that if you work hard, things still won't turn out right?

a Yes

b No

*28. When you make plans, are you almost sure you can make them work?

f Yes

g No

*29. I feel I have much to be proud of.

a Agree

b Undecided

c Disagree

*30. Would you say you are very happy, usually happy, or not too happy these days?

f Very happy

g Usually happy

h Not too happy

*31. Do you think you will go to college?

a Yes

b No

32. How do you usually get to school?

f Walk or bicycle

g School bus, - less than 30 minutes

h School bus, - more than 30 minutes

j Car

k Some other way

33. Have you ever had an American Indian or Alaskan Native teacher as your regular teacher?

a Yes, in this school

b Yes, in another school

c No

d Don't Know

34. Have you every had an Asian American or Pacific Islander teacher as your regular teacher?

f Yes, in this school

g Yes, in another school

h No

j Don't know

35. Have you ever had a Black teacher as your regular teacher?

a Yes, in this school

b Yes, in another school

c No

d Don't know

36. Have you ever had a Hispanic teacher as your regular teacher?

f Yes, in this school

g Yes, in another school

h No

j Don't know

37. Have you ever had a White teacher as your regular teacher?

a Yes, in this school

b Yes, in another school

c No

d Don't know

*38. How do you think most of your teachers feel about minorities and whites going to the same school together?

f They like it

g They don't like it

h It doesn't matter to them

j Don't know

*39. How do you think your principal feels about minorities and whites going to the same school together?

a The principal likes it

b The principal doesn't like it

c It doesn't matter to the principal

d Don't know

40. Think for a moment about the three students you talk with most often at this school. Are they the same race as you?

f Yes, all are the same race as I am

g No, one or more is from another race

*41. Have you ever called a student of a different race on the phone?

a Yes

b No

*42. This school year, have you helped a student from another race with school work?

f Yes

g No

*43. This school year, have you asked a student from another race to help you with your school homework?

a Yes

b No

*44. If you could choose the kind of school you would go to, would you pick one with:

f Asian Students

g All Black students

h All Hispanic students

j All White students

k A mixture of different kinds of students

*45. Would you like to have more friends who are of a different race?

a Yes

b No

46. Where did you attend 4th grade?

f This school

g Another Los Angeles City school

h Other

1. Which of the following best describes you?

   a American Indian or Alaskan Native

   b Asian American or Pacific Islander

   c Black

   d Hispanic

   e White

2. How many brothers and sisters do you have?

   f None

   g One

   h Two

   j Three

   k Four or more

3. Are you a member of any school clubs or sports teams?

   a Yes

   b No

4. During this school year, have you ever talked with a counselor?

   f Yes

   g No

   h Don't have a counselor

*5. Think about most of the work you have to do in school. Is it too hard, too easy, or just about right?

   a Too hard

   b Too easy

   c Just about right

6. How do your parents feel about the grades you get in school?

f Very satisfied

g Somewhat satisfied

h Somewhat dissatisfied

j Very dissatisfied

k I don't know

*7. Forget for a moment how teachers grade your school work. How do you rate yourself in your school ability compared with those in your class at school?

a I am one of the best

b I am above average

c I am average

d I am below average

e I am one of the poorest

8. How much time do you usually spend doing homework after school?

f None, or almost none

g Less than 1/2 hour a day

h About 1/2 hour a day

j About 1 hour a day

k About 2 hours a day or more

9. In the past week, did you do any school work or homework that was interesting?

a Yes

b No

10. Have either of your parents come to school this year for Parent Teachers Association (P.T.A.) meetings, School Community Advisory Council meetings, school events, or for parent conferences?

f Yes

g No

h Don't know

*11. When a teacher says that he or she is going to give the class a test, do you become afraid that you will do poor work?

a Yes

b No

*12. At school, are you often blamed for things that just aren't your fault?

f Yes

g No

* 13. Do you think most of the rules in this school are fair?

a Yes

b No

14. Is there any udult at this school you could talk to if you were upset or in trouble?

f Yes

g No

*15. Have you been in any fights at school this year?

a Yes

b No

*16. In this school year, were you ever sent to the office because someone thought you were breaking some school rule?

f Yes

g No

*17. During this school year, did you ever stay away from school just because you didn't want to come?

a Never

b Yes, for 1 or 2 days

c Yes, for 3 to 6 days

d Yes, for 7 to 15 days

e Yes, for 16 or more days

*18. When bad things are going to happen, they just are going to happen no matter what you try to do to stop them.

f Agree

g Undecided

h Disagree

*19. On the whole, I am satisfied with myself.

a Agree

b Undecided

c Disagree

*20. Good luck is just as important for sucoess as hard work.

f Agree

g Undecided

h Disagree

*21. I feel I have much to be proud of.

a Agree

b Undecided

c Disagree

*22. Some kids are just naturally lucky.

f Agree

g Undecided

h Disagree

*23. I feel as if I really belong in this school.

a Agree

b Undecided

c Disagree

*24. When I make plans, I am almost sure I can make them work.

f Agree

g Undecided

h Disagree

* 25. Everything considered, are you very happy, usually happy, or not too happy these days?

a Very happy

b Usually happy

c Not too happy

*26. Do you think you will go to college?

f Yes

g No

*27. In the morning, are you usually glad to go to school?

a Yes

b No

*28. When you get punished at school, does it usually seem it's for no good reason at all?

f Yes

g No

*29. Do you usually like school?

a Yes

b No

*30. I am good at my work.

f Agree

g Undecided

h Disagree

*31. I am a good reader.

a Agree

b Undecided

c Disagree

*32. I am good in math.

f Agree

g Undecided

h Disagree

*33. I am good in social studies.

a Agree

b Undecided

c Disagree

*34. I am good in sports.

f Agree

g Undecided

h Disagree

*35. I am good at writing.

a Agree

b Undecided

c Disagree

*36. I am good at drawing things.

f Agree

g Undecided

h Disagree

*37. I am good in music.

a Agree

b Undecided

c Disagree

*38. I am good at making things with my hands.

f Agree

g Undecided

h Disagree

*39. Teachers like me.

a Agree

b Undecided

c Disagree

*40. I am liked by kids my own age.

f Agree

g Undecided

h Disagree

*41. I have as many friends as most kids.

a Agree

b Undecided

c Disagree

42. How do you <u>usually</u> get to school (please mark only the most used method)?

f Walk or bicycle

g School bus, - less than 30 minutes

h School bus, - more than 30 minutes

j Car

k Some other way

43. Was the elementary school you went to for the longest time ----

a Mostly American Indian or Alaskan Native

b Mostly Asian American or Pacific Islander

c Mostly Black

d Mostly Hispanic

e Mostly White

44. Have you ever had an American Indian or Alaskan Native teacher as your regular teacher?

f Yes, at this school

g Yes, at another school

h No

j Don't know

45. Have you ever had an Asian American or Pacific Islander teacher as your regular teacher?

a Yes, at this school

b Yes, at another school

c No

d Don't know

46. Have you ever had a Black teacher as your regular teacher?

f Yes, at this school

g Yes, at another school

h No

j Don't know

47. Have you ever had an Hispanic teacher as your regular teacher?

a Yes, in this school

b Yes, at another school

c No

d Don't know

48. Have you ever had a White teacher as your regular teacher?

f Yes, in this school

g Yes, at another school

h No

j Don't know

* 49. How do you think most of your teachers feel about minorities and whites going to the same school together?

a They like it

b They don't like it

c It doesn't matter to them

d Don't know

* 50. Think for a moment about the three students you talk with most often at this school. Are they the same race as you?

f Yes, all are the same race as I am

g No, one or more is from another race

* 51. Have you ever called a student of a different race on the phone?

a Yes

b No

* 52. This school year, have you helped a student from another race with school work in class?

f Yes

g No

* 53. This school year, have you asked a student from another race to help you with your school homework?

a Yes

b No

*54. If you could choose the kind of school you would go to, would you pick one with:

f All American Indian or Asian students

g All Black students

h All Hispanic students

j All White students

k A mixture of different kinds of students

* 55. Would you like to have more friends who are of a different race?

a Yes

b No

HERE IS A LIST OF THINGS THAT HAVE HAPPENED IN SOME SCHOOLS. PLEASE INDICATE WHETHER OR NOT EACH OF THESE HAS HAPPENED AT YOUR SCHOOL THIS SCHOOL YEAR.

* 56. If American Indian or Alaskan Native students are present at this school, have there been complaints of favoritism's being shown to them?

f Yes

g No

h Don't know

*57. If Asian American or Pacific Islander students are present at this school, have there been complaints of favoritism's being shown to them?

a Yes

b No

c Don't know

*58. If Black students are present at this school, have there been complaints of favoritism's being shown to them?

f Yes

g No

h Don't know

*59. If Hispanic students are present at this school, have there been complaints of favoritism's being shown to them?

a Yes

b No

c Don't know

*60. If White students are present at this school, have there been complaints of favoritism's being shown to them?

f Yes

g No

h Don't know

*61. If there are American Indian or Alaskan Native students in this school, are any teachers unfair to these students?

a Yes

b No

c Don't know

*62. If there are Asian American or Pacific Islander students in this school, are any teachers unfair to these students?

f Yes

g No

h Don't know

* 63. If there are Black students in this school, are any teachers unfair to these students?

a Yes

b No

c Don't know

* 64. If there are Hispanic students in this school, are any teachers unfair to these students?

f Yes

g No

h Don't know

*65. If there are White students in this school, are any teachers unfair to these students?

a Yes

b No

c Don't know

66. Where did you attend 7th grade?

f This school

g Another Los Angeles City School

h Other